

0200

OIPE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/575,554

DATE: 05/31/2000
 TIME: 17:30:51

Input Set : A:\ESPTO.txt
 Output Set: N:\CRF3\05312000\I575554.raw

3 (1) GENERAL INFORMATION:
 4 (i) APPLICANT: Monia, B.P., Cowser, L.M. and Manoharan, M.
 5 (ii) TITLE OF INVENTION: Antisense Oligonucleotide Inhibition of ras
 6 (iii) NUMBER OF SEQUENCES: 55
 7 (iv) CORRESPONDENCE ADDRESS:
 8 (A) ADDRESSEE: Jane Massey Licata
 9 (B) STREET: 66 East Main Street
 10 (C) CITY: Marlton
 11 (D) STATE: NJ
 12 (E) COUNTRY: USA
 13 (F) ZIP: 08053
 14 (v) COMPUTER READABLE FORM:
 15 (A) MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB STORAGE
 16 (B) COMPUTER: IBM COMPATIBLE
 17 (C) OPERATING SYSTEM: WINDOWS 95
 18 (D) SOFTWARE: WORDPERFECT 6.1 for WINDOWS
 19 C--> 21 (vi) CURRENT APPLICATION DATA:
 20 C--> 22 (A) APPLICATION NUMBER: US/09/575,554
 21 C--> 23 (B) FILING DATE: 22-May-2000
 22 C--> 24 (C) CLASSIFICATION:
 23 C--> 37 (vii) PRIOR APPLICATION DATA:
 24 C--> 38 (A) APPLICATION NUMBER: 09/128,494
 25 (B) FILING DATE: August 3, 1998
 26 (A) APPLICATION NUMBER: 08/411,734
 27 (B) FILING DATE: April 3, 1995
 28 (A) APPLICATION NUMBER: PCT/US93/09346
 29 (B) FILING DATE: October 1, 1993
 30 (A) APPLICATION NUMBER: 07/958,134
 31 (B) FILING DATE: October 5, 1992
 32 (A) APPLICATION NUMBER: 08/007,996
 33 (B) FILING DATE: January 21, 1993
 34 (viii) ATTORNEY/AGENT INFORMATION:
 35 (A) NAME: Jane Massey Licata
 36 (B) REGISTRATION NUMBER: 32,257
 37 (C) REFERENCE/DOCKET NUMBER: ISPH-0463
 38 (ix) TELECOMMUNICATION INFORMATION:
 39 (A) TELEPHONE: (856) 810-1515
 40 (B) TELEFAX: (856) 810-1454
 41 (2) INFORMATION FOR SEQ ID NO: 1:
 42 (i) SEQUENCE CHARACTERISTICS:
 43 (A) LENGTH: 20
 44 (B) TYPE: Nucleic Acid
 45 (C) STRANDEDNESS: Single
 46 (D) TOPOLOGY: Linear
 47 (iv) ANTI-SENSE: Yes
 48 C--> 55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
 49 C--> 56 CTTATATTCC GTCATCGCTC

ENTERED

20

RAW SEQUENCE LISTING DATE: 05/31/2000
 PATENT APPLICATION: US/09/575,554 TIME: 17:30:51

Input Set : A:\ESPTO.txt
 Output Set: N:\CRF3\05312000\I575554.raw

58 (2) INFORMATION FOR SEQ ID NO: 2:
 59 (i) SEQUENCE CHARACTERISTICS:
 60 (A) LENGTH: 20
 61 (B) TYPE: Nucleic Acid
 62 (C) STRANDEDNESS: Single
 63 (D) TOPOLOGY: Linear
 64 (iv) ANTI-SENSE: Yes
 C--> 65 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
 66 TCCGTCATCG CTCCCTCAGGG 20
 68 (2) INFORMATION FOR SEQ ID NO: 3:
 69 (i) SEQUENCE CHARACTERISTICS:
 70 (A) LENGTH: 17
 71 (B) TYPE: Nucleic Acid
 72 (C) STRANDEDNESS: Single
 73 (D) TOPOLOGY: Linear
 74 (iv) ANTI-SENSE: Yes
 C--> 75 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
 76 CCACACCGAC GGCGCCC 17
 78 (2) INFORMATION FOR SEQ ID NO: 4:
 79 (i) SEQUENCE CHARACTERISTICS:
 80 (A) LENGTH: 19
 81 (B) TYPE: Nucleic Acid
 82 (C) STRANDEDNESS: Single
 83 (D) TOPOLOGY: Linear
 84 (iv) ANTI-SENSE: Yes
 C--> 85 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
 86 CCCACACCGA CGGGCCCCA 19
 88 (2) INFORMATION FOR SEQ ID NO: 5:
 89 (i) SEQUENCE CHARACTERISTICS:
 90 (A) LENGTH: 21
 91 (B) TYPE: Nucleic Acid
 92 (C) STRANDEDNESS: Single
 93 (D) TOPOLOGY: Linear
 94 (iv) ANTI-SENSE: Yes
 C--> 95 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
 96 GCCCACACCG ACGGGGCCCA C 21
 98 (2) INFORMATION FOR SEQ ID NO: 6:
 99 (i) SEQUENCE CHARACTERISTICS:
 100 (A) LENGTH: 23
 101 (B) TYPE: Nucleic Acid
 102 (C) STRANDEDNESS: Single
 103 (D) TOPOLOGY: Linear
 104 (iv) ANTI-SENSE: Yes
 C--> 105 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
 106 TGCCCCACACC GACGGCGCCC ACC 23
 108 (2) INFORMATION FOR SEQ ID NO: 7:
 109 (i) SEQUENCE CHARACTERISTICS:
 110 (A) LENGTH: 20
 111 (B) TYPE: Nucleic Acid

RAW SEQUENCE LISTING DATE: 05/31/2000
 PATENT APPLICATION: US/09/575,554 TIME: 17:30:51

Input Set : A:\ESPTO.txt
 Output Set: N:\CRF3\05312000\I575554.raw

```

112      (C) STRANDEDNESS: Single
113      (D) TOPOLOGY: Linear
114      (iv) ANTI-SENSE: Yes
C--> 115      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
116      TATTCCGTCA TCGCTCCTCA          20
118 (2) INFORMATION FOR SEQ ID NO: 8:
119      (i) SEQUENCE CHARACTERISTICS:
120          (A) LENGTH: 5
121          (B) TYPE: Nucleic Acid
122          (C) STRANDEDNESS: Single
123          (D) TOPOLOGY: Linear
124      (iv) ANTI-SENSE: Yes
C--> 125      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
126      CGACG          5
128 (2) INFORMATION FOR SEQ ID NO: 9:
129      (i) SEQUENCE CHARACTERISTICS:
130          (A) LENGTH: 7
131          (B) TYPE: Nucleic Acid
132          (C) STRANDEDNESS: Single
133          (D) TOPOLOGY: Linear
134      (iv) ANTI-SENSE: Yes
C--> 135      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
136      CCGACCG          7
138 (2) INFORMATION FOR SEQ ID NO: 10:
139      (i) SEQUENCE CHARACTERISTICS:
140          (A) LENGTH: 9
141          (B) TYPE: Nucleic Acid
142          (C) STRANDEDNESS: Single
143          (D) TOPOLOGY: Linear
144      (iv) ANTI-SENSE: Yes
C--> 145      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
146      ACCGACCGC          9
148 (2) INFORMATION FOR SEQ ID NO: 11:
149      (i) SEQUENCE CHARACTERISTICS:
150          (A) LENGTH: 11
151          (B) TYPE: Nucleic Acid
152          (C) STRANDEDNESS: Single
153          (D) TOPOLOGY: Linear
154      (iv) ANTI-SENSE: Yes
C--> 155      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
156      CACCGACGGC G          11
158 (2) INFORMATION FOR SEQ ID NO: 12:
159      (i) SEQUENCE CHARACTERISTICS:
160          (A) LENGTH: 13
161          (B) TYPE: Nucleic Acid
162          (C) STRANDEDNESS: Single
163          (D) TOPOLOGY: Linear
164      (iv) ANTI-SENSE: Yes
C--> 165      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

```

RAW SEQUENCE LISTING DATE: 05/31/2000
 PATENT APPLICATION: US/09/575,554 TIME: 17:30:51

Input Set : A:\ESPTO.txt
 Output Set: N:\CRF3\05312000\I575554.raw

166	ACACCGACGG CGC	13
168	(2) INFORMATION FOR SEQ ID NO: 13:	
169	(i) SEQUENCE CHARACTERISTICS:	
170	(A) LENGTH: 15	
171	(B) TYPE: Nucleic Acid	
172	(C) STRANDEDNESS: Single	
173	(D) TOPOLOGY: Linear	
174	(iv) ANTI-SENSE: Yes	
C--> 175	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:	
176	CACACCGACG GCGCC	15
178	(2) INFORMATION FOR SEQ ID NO: 14:	
179	(i) SEQUENCE CHARACTERISTICS:	
180	(A) LENGTH: 16	
181	(B) TYPE: Nucleic Acid	
182	(C) STRANDEDNESS: Single	
183	(D) TOPOLOGY: Linear	
184	(iv) ANTI-SENSE: Yes	
C--> 185	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:	
186	CCACACCGAC GGGCC	16
188	(2) INFORMATION FOR SEQ ID NO: 15:	
189	(i) SEQUENCE CHARACTERISTICS:	
190	(A) LENGTH: 16	
191	(B) TYPE: Nucleic Acid	
192	(C) STRANDEDNESS: Single	
193	(D) TOPOLOGY: Linear	
194	(iv) ANTI-SENSE: Yes	
C--> 195	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:	
196	CACACCGACG GCGCC	16
198	(2) INFORMATION FOR SEQ ID NO: 16:	
199	(i) SEQUENCE CHARACTERISTICS:	
200	(A) LENGTH: 18	
201	(B) TYPE: Nucleic Acid	
202	(C) STRANDEDNESS: Single	
203	(D) TOPOLOGY: Linear	
204	(iv) ANTI-SENSE: Yes	
C--> 205	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:	
206	CCACACCGA CGGCGCC	18
208	(2) INFORMATION FOR SEQ ID NO: 17:	
209	(i) SEQUENCE CHARACTERISTICS:	
210	(A) LENGTH: 18	
211	(B) TYPE: Nucleic Acid	
212	(C) STRANDEDNESS: Single	
213	(D) TOPOLOGY: Linear	
214	(iv) ANTI-SENSE: Yes	
C--> 215	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:	
216	CCACACCGAC GGGGCCA	18
218	(2) INFORMATION FOR SEQ ID NO: 18:	
219	(i) SEQUENCE CHARACTERISTICS:	
220	(A) LENGTH: 25	

RAW SEQUENCE LISTING DATE: 05/31/2000
PATENT APPLICATION: US/09/575,554 TIME: 17:30:51

Input Set : A:\ESPTO.txt
Output Set: N:\CRF3\05312000\I575554.raw

221 (B) TYPE: Nucleic Acid
222 (C) STRANDEDNESS: Single
223 (D) TOPOLOGY: Linear
224 (iv) ANTI-SENSE: Yes
C--> 225 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
226 TTGCCACAC CGACGGCGCC CACCA 25
228 (2) INFORMATION FOR SEQ ID NO: 19:
229 (i) SEQUENCE CHARACTERISTICS:
230 (A) LENGTH: 17
231 (B) TYPE: Nucleic Acid
232 (C) STRANDEDNESS: Single
233 (D) TOPOLOGY: Linear
234 (iv) ANTI-SENSE: Yes
C--> 235 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
236 CCACACCGCC GGGGCC 17
238 (2) INFORMATION FOR SEQ ID NO: 20:
239 (i) SEQUENCE CHARACTERISTICS:
240 (A) LENGTH: 20
241 (B) TYPE: Nucleic Acid
242 (C) STRANDEDNESS: Single
243 (D) TOPOLOGY: Linear
244 (iv) ANTI-SENSE: Yes
C--> 245 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20
246 CTGCCTCCGC CGCCGCGGCC 20
248 (2) INFORMATION FOR SEQ ID NO: 21:
249 (i) SEQUENCE CHARACTERISTICS:
250 (A) LENGTH: 20
251 (B) TYPE: Nucleic Acid
252 (C) STRANDEDNESS: Single
253 (D) TOPOLOGY: Linear
254 (iv) ANTI-SENSE: Yes
C--> 255 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:
256 CAGTGCCTGC GCCCGCGCTCG 20
258 (2) INFORMATION FOR SEQ ID NO: 22:
259 (i) SEQUENCE CHARACTERISTICS:
260 (A) LENGTH: 20
261 (B) TYPE: Nucleic Acid
262 (C) STRANDEDNESS: Single
263 (D) TOPOLOGY: Linear
264 (iv) ANTI-SENSE: Yes
C--> 265 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:
266 AGGCCTCTCT CCCGCACCTG 20
268 (2) INFORMATION FOR SEQ ID NO: 23:
269 (i) SEQUENCE CHARACTERISTICS:
270 (A) LENGTH: 20
271 (B) TYPE: Nucleic Acid
272 (C) STRANDEDNESS: Single
273 (D) TOPOLOGY: Linear
274 (iv) ANTI-SENSE: Yes

VERIFICATION SUMMARY DATE: 05/31/2000
PATENT APPLICATION: US/09/575,554 TIME: 17:30:52

Input Set : A:\ESPT0.txt
Output Set: N:\CRF3\05312000\1575554.raw

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/575,554

DATE: 05/31/2000
TIME: 17:30:52

Input Set : A:\ESPTO.txt
Output Set: N:\CRF3\05312000\I575554.raw

L:485 M:220 C: Keyword misspelled or invalid format, [(xi) SEQUENCE DESCRIPTION: SEQ ID NO:]
L:495 M:220 C: Keyword misspelled or invalid format, [(xi) SEQUENCE DESCRIPTION: SEQ ID NO:]